

The claims have been amended to better define the claimed invention and distinguish same from the prior art. More particularly, claim 1 has been amended to incorporate the limitations of claim 2, which has been cancelled.

Turning to the art rejections, and considering first the rejection of claims 1, 4 and 7-11 as anticipated by Applicant's earlier U.S. Patent 6,054,171, as noted supra, claim 1 has been amended to incorporate the limitations of claim 2, thus rendering moot the anticipation rejection of claims 1, 4 and 7-11.

Turning to the rejection of claims 2, 3, 5 and 6 as obvious from Shoji in view of the admitted prior art (APA) and Okumura, in the rejection, the Examiner acknowledges the primary reference Shoji (which, incidentally, is Applicant's own earlier U.S. Patent) fails to teach using a conductive paste for fixing the electrodes to the conductive pattern. However, the Examiner takes the position that such would be obvious from the APA and Okumura, Applicant submits that neither the APA nor Okumura taken alone or in combination discloses or suggests a device in which electrodes are fixed to a conductive pattern by means of a conductive paste as required by Applicant's claimed invention. In the APA, as discussed on pages 1-5 of Applicant's specification, the solder balls are temporarily adhered to the conductive lands by the flux (see page 3, lines 8-9). Okumura discusses conductive pastes. However, Okumura employs conductive pastes for an entirely different purposes. There is no disclosure or suggestion in Okumura that the conductive paste may be used to fix solder balls to a conductive pattern as required by Applicant's claims.

In the obviousness rejection, the Examiner refers to Jacobs, column 1 and 2 as teaching "a solder or conductive paste for the bump interconnection." Actually, what Jacobs teaches is that solder or conductive paste as the material actually used to form bumps on a substrate. In Applicant's claimed invention, conductive paste is used as the material to fix (preformed) electrodes to the substrate. There is no disclosure or disclosure within Jacobs that conductive paste may be used to fix electrodes to a conductive pattern. Thus, Jacobs doesn't supply the missing teachings to Shoji, the APA and Okumura to achieve or render obvious the claimed invention.

In the rejection the Examiner also refers to Mori as teaching as conventional thermosetting resins "polyimide resin, epoxy resin, phenol resin, silicon (sic) resin, etc. for insulating the electrodes." Be that as it may, the more basic and essential teachings missing from the primary reference Shoji, and the APA and Okumura, as above discussed, are not found in Mori. Thus, the claims cannot be said to be obvious from Shoji, the APA, Okumura and Mori.

Since none of the art of record teaches using a conductive paste to fix electrode bumps to conductive patterns, no combination of the art of record could lead to Applicant's claimed invention or the advantages thereof. Accordingly, it is submitted that the claims are patentable over all the art of record.

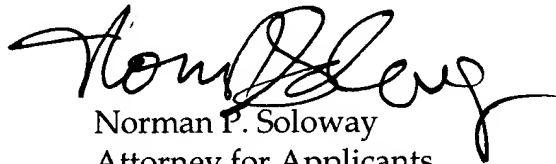
The objection to the drawing is noted. Applicant will file corrected formal drawings once the application is allowed.

The finality of the restriction requirement is noted. It is respectfully requested that the non-elected method claims be retained in this application, without further action thereon, for possible rejoinder and/or for filing of a divisional application.

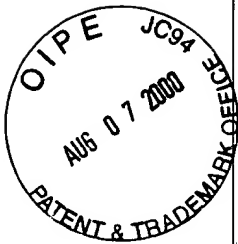
A Prior Art Disclosure Statement and Certification under 37 CFR 1.97(e) accompanies this Amendment.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 08-1391.

Respectfully submitted,


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I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231 on August 1, 2000, at Manchester, New Hampshire.

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